

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. – 52. (Canceled)

53. (Currently amended) A method to provide information of a system in a network, the method comprising the steps of:

creating a local data structure in a network device with an attached end system;
populating said local data structure with alias information about a locally attached end system identifier and a source port identifier of said network device; and
populating said local data structure with at least one VLAN mapping, wherein the at least one VLAN mapping identifies a virtual LAN to which the attacheded end system belongs.

54. (Previously presented) The method of claim 53, wherein said step of populating said local data structure is performed in at least one of an implicit manner and an explicit manner.

55. (Previously presented) The method of claim 53, wherein said end system identifier includes a MAC address of the attached end system.

56. (Previously presented) The method of claim 53, wherein said data structure can further hold additional information identifying at least one of an owner switch, an alias type, a VLAN policy, and a VLAN ID.

57. (Currently amended) A method to provide a virtual data structure of a system in a network, the method comprising the steps of:

creating a data structure in a network device with an attached end system;
populating said data structure with alias information about a locally attached end system identifier;
populating said ~~local~~ data structure with at least one VLAN mapping, wherein the at least one VLAN mapping identifies a virtual LAN to which the attached end system belongs; and
reading data from two or more data structures in a network.

58. (Previously presented) The method of claim 57, wherein the virtual data structure is used to establish an association of a MAC address to alias information for a system in the network.

59. (Previously presented) The method of claim 57 wherein said virtual data structure is used to establish an association of a MAC address to an IP address for a system in the network.

60. (Previously presented) The method of claim 57 further comprising the step of, locating a device in the network.

61. (Previously presented) The method of claim 60, wherein the step of locating includes a step of constructing a query for said virtual data structure to retrieve information to locate the device.

62. (Previously presented) The method of claim 60, wherein a location of the device comprises an identifier of a network device having said device locally attached.

63. (Previously presented) The method of claim 60, wherein a location of the device comprises a network device and a port identifier of the network device having said device locally attached.

64. – 66. (Canceled)

67. (Previously presented) A network device with an attached end system, comprising:

a port to receive network traffic; and

a data processing mechanism configured to create a local data structure that includes at least alias information about a locally attached end system identifier and a source port identifier of said network device, wherein the local data structure further includes at least one VLAN mapping that identifies a virtual LAN to which the attached end system belongs.